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of the optical system with a first sensor, said optical system including at least an illumination system which irradiates said exposure light onto an original;

generating said exposure light from said light source, said exposure light being incident on said optical system of which the optical property is adjusted; and

receiving said exposure light through at least a part of said optical system with a second sensor to obtain an optical property of said optical system at the wavelength of said exposure light.

23. (Twice Amended) A method of adjusting an exposure apparatus having an x-ray source, which exposes an object with exposure light from the x-ray source, comprising:

generating, from said x-ray source, light having a wavelength which is different from that of said exposure light, said light including one of ultraviolet light and visible light;

receiving said generated light from said x-ray source with a light detector to obtain positional information with respect to said x-ray source; and

adjusting said x-ray source with respect to an illumination system which irradiates said exposure light onto an original based on said positional information.

24. (Twice Amended) A method of exposing an object with exposure light from an x-ray source, comprising:

receiving light generated concurrently with said exposure light from said x-ray source with a light detector to obtain positional information with respect to said x-ray source, the light having a wavelength different from that of said exposure light;

adjusting said x-ray source with respect to an illumination system which irradiates said exposure light onto an original based on said positional information; and illuminating said original with said exposure light through said illumination system to expose said object with the illuminated original.



25. (Twice Amended) A method of making an exposure apparatus which exposes an object with exposure light, comprising:

arranging an optical system in an optical path through which said exposure light passes, said optical system including at least an illumination system which irradiates said exposure light onto an original;

providing a light source that generates said exposure light and non-exposure light having a wavelength which is different from that of said exposure light and including at least one of ultraviolet light and visible light;

receiving said non-exposure light from said light source through at least a part of said optical system to obtain first information with respect to said optical system;

adjusting an optical property of said optical system based on said first information;

receiving said exposure light from said light source through at least a part of said optical system of which the optical property is adjusted to obtain second information with respect to said optical system; and

adjusting an optical property of said optical system based on said second information.

- 31. (Amended) A method according to claim 30, wherein said optical system includes a projection system which projects an image of said original illuminated with said exposure light by said illumination system on said object.
- 42. (Amended) An apparatus according to claim 41, wherein said first sensor receives said non-exposure light while an optical path therefor is kept in an atmosphere being substantially the same as atmospheric air.



